J.

Serial No. 09/476,770 Customer ID: 25094

IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) A method of transforming a digital subscriber loop signals, comprising:

providing the digital subscriber loop signal; and

increasing a gain of the digital subscriber loop signal with a digital subscriber loop repeater including:

isolating an upstream signal band by passing an upstream signal through an upstream pass filter;

amplifying the isolated upstream signal with an upstream amplifier;
isolating a downstream signal band by passing a downstream signal through a
downstream pass filter; and

amplifying the isolated downstream signal with a downstream amplifier.

- 2. (Currently Amended) The method of claim 1, wherein increasing the gain of the digital subscriber loop signal includes increasing the gain of the digital subscriber loop signal with an asymmetrical digital subscriber loop repeater.
- 3-4. (Canceled)
- 5. (Original) The method of claim 1, further comprising processing the digital subscriber loop signal with an echo cancellation filter.
- 6. (Original) The method of claim 1, further comprising frequency division duplexing.
- 7. (Original) The method of claim 6, wherein frequency division duplexing includes passing the digital subscriber loop signal through a low pass filter after increasing the gain of the digital subscriber loop signal.
- 8. (Canceled)

Cox

Serial No. 09/476,770 Customer ID: 25094

- 9. (Original) The method of claim 1, further comprising remotely fine-tuning the digital subscriber loop repeater using control signals sent to the digital subscriber loop repeater.
- 10. (Original) The method of claim 1, further comprising remotely reconfiguring the digital subscriber loop repeater using control signals sent to the digital subscriber loop repeater.
- 11. (Original) The method of claim 1, further comprising querying the digital subscriber loop repeater for a purpose selected from the group consisting of controlling the operation of the digital subscriber loop repeater and determining the status of the digital subscriber loop repeater.
- 12. (Currently Amended) <u>A method of transforming a digital subscriber loop signal</u>, comprising:

providing the digital subscriber loop signal;

increasing a gain of the digital subscriber loop signal with a digital subscriber loop repeater; and

querying the digital subscriber loop repeater for a purpose selected from the group consisting of controlling the operation of the digital subscriber loop repeater and determining the status of the digital subscriber loop repeater The method of claim 11,

wherein controlling the operation of the digital subscriber loop repeater includes provisioning the digital subscriber loop repeater with an operational mode selected from the group consisting of normal, no-ADSL-repeater with coils in circuit, and no-ADSL-repeater with coils out of circuit.

- 13. (Original) The method of claim 11, wherein querying the digital subscriber loop repeater includes maintaining the digital subscriber loop repeater by causing the digital subscriber loop repeater to enter into a loop-back state.
- 14. (Currently Amended) A digital subscriber loop repeater comprising: an upstream signal isolating pass filter; an upstream signal amplifier coupled to the upstream signal isolating pass filter; a downstream signal isolating pass filter; and



- 15. (Original) The digital subscriber loop repeater of claim 14, wherein said digital subscriber loop repeater includes an asymmetric digital subscriber loop repeater.
- 16. (Canceled)
- 17. (Currently Amended) The digital subscriber loop repeater of claim 46 14, wherein the downstream signal isolating pass filter includes further comprising a high pass filter coupled to an output of the downstream amplifier.
- 18. (Currently Amended) The digital subscriber loop repeater of claim 46 <u>17</u>, further comprising <u>a high pass filter coupled to an output of the downstream</u> an upstream amplifier.
- 19. (Currently Amended) The digital subscriber loop repeater of claim 48 14, wherein the upstream signal isolating pass filter includes further comprising a band pass filter coupled to an input of the upstream amplifier.
- 20. (Original) The digital subscriber loop repeater of claim 19, further comprising a band pass filter coupled to an output of the upstream amplifier.
- 21. (Original) A digital subscriber loop, comprising the digital subscriber loop repeater of claim 14.
- 22. (Canceled)
- 23. (Original) A kit comprising the digital subscriber loop repeater of claim 14.
- 24. (Original) The digital subscriber loop repeater of claim 14, further comprising a power connection coupled to the amplifier.
- 25. (Original) The digital subscriber loop repeater of claim 14, further comprising a

Cole

control information connection coupled to the amplifier.

26. (Currently Amended) A digital subscriber loop, comprising:

a digital subscriber loop repeater including:

an upstream signal isolating pass filter;

an upstream signal amplifier coupled to the upstream signal isolating pass filter;

a downstream signal isolating pass filter; and

a downstream signal amplifier coupled to the downstream signal isolating pass

filter.

27. (Original) The digital subscriber loop of claim 26, wherein said digital subscriber loop includes an asymmetric digital subscriber loop and said digital subscriber loop repeater includes an asymmetric digital subscriber loop repeater.

28. (Canceled)

- 29. (Currently Amended) The digital subscriber loop of claim 28, wherein the digital subscriber loop repeater downstream signal isolating filter includes a high pass filter coupled to an input of the downstream amplifier.
- 30. (Currently Amended) The digital subscriber loop of claim 29, <u>further comprising</u> wherein the digital subscriber loop repeater includes a <u>high</u> pass filter coupled to an output of the <u>downstream</u> amplifier.
- 31. (Canceled)
- 32. (Currently Amended) The digital subscriber loop of claim 31, wherein the digital subscriber loop repeater upstream signal isolating filter includes a band pass filter coupled to an input of the upstream amplifier.
- 33. (Currently Amended) The digital subscriber loop of claim 32, further comprising wherein

Gray Cary\AU\4122880.1 2500894-991130

the digital subscriber loop repeater includes a band pass filter coupled to an output of the upstream amplifier.

- 34. (Original) The digital subscriber loop of claim 26, further comprising an echo cancellation filter coupled to the digital subscriber loop repeater.
- 35. (Original) The digital subscriber loop of claim 26, further comprising a low pass filter coupled to the digital subscriber loop repeater and a high pass filter coupled to the digital subscriber loop repeater.
- 36. (Canceled)
- 37. (Original) A digital subscriber loop network, comprising the digital subscriber loop of claim 26.
- 38. (Original) The digital subscriber loop of claim 26, wherein the digital subscriber loop repeater includes a power connection.
- 39. (Original) The digital subscriber loop of claim 26, wherein the digital subscriber loop repeater includes a control information connection.

Court